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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,414	06/07/2001	Gal Mor	COLB-115XX	7292
207	7590	12/30/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP			CHOU, ALBERT T	
TEN POST OFFICE SQUARE			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	
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DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/876,414	<b>Applicant(s)</b> MOR ET AL.	
	<b>Examiner</b> Albert T. Chou	<b>Art Unit</b> 2662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06-07-2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-17, 19, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 7-9, 18 and 20-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 10, 11, 13-17, 19 and 23 are rejected under U.S.C. 102(e) as being anticipated by Mitchell (US Patent Number: 6,442,134).
3. Regarding claims 1 and 15, Mitchell teaches (figure 4) a communication network / a method for communication comprises four nodes, A, B, C and D, which are interconnected by OC-12c fiber links (*a communication medium*) to form an ATM ring (*Communication nodes mutually coupled by the communication medium to form a ring*). Mitchell also teaches in a Uni-directional ATM Switched Ring **UASR** (figures 3-4; col. 2, lines 38-44), the traffic is transmitted in opposite direction on two counter-rotating rings (*each of the nodes is configured to transmit traffic to the other nodes in both clockwise and counter-clockwise directions around the ring*). Mitchell further teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 7-14), if both rings are fault-free, any node on the ring is free to receive data from either ring. If a fault occurs on one of the rings, then all nodes program to receive data off the other fault-free ring (*at*

*least one of the node is configured to receive the traffic in only one of the directions at any given time).*

4. Regarding claims 2 and 16, Mitchell teaches (figure 3; col. 2, lines 45-67; col. 3, lines 1-3) an example of gateway node which is configured to receive the traffic in the direction in which one of the nodes can be reached in a minimum number of hops (*the plurality of nodes comprising a gateway node*).

5. Regarding claims 3 and 17, Mitchell teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 12-14), if both rings have faults, all nodes, including gateway node, receive data from both rings (*gateway node is configured to receive the traffic in both the clockwise and counter-clockwise directions*).

6. Regarding claim 4, Mitchell illustrates (figures 3-4), either one of nodes, A, B, C or D, can be an access node to provide the ATM network access from other networks or users (*at least one of the nodes comprises a network access node*).

7. Regarding claims 6 and 19, Mitchell teaches in a Uni-directional ATM Switched Ring **UASR** (figures 3-4; col. 2, lines 38-44), the traffic is transmitted in opposite direction on two counter-rotating rings. Mitchell also teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 7-14), if both rings are fault-free, any node on the ring is free to receive data from either ring. If a fault occurs on one of the rings, then all nodes program to receive data off the other fault-free ring. Mitchell further teaches (figures 5-6; col. 3, lines 27-44) an example of double ring fault which indicates nodes are adapted to maintain indicative information of how other nodes are configured (*nodes are adapted to maintain information indicative of other nodes are configured and*

*to select the directions to transmit the traffic to the other nodes responsive to the information).*

8. Regarding claims 10 and 23, Mitchell teaches in a Uni-directional ATM Switched Ring **UASR** (figures 3-4; col. 2, lines 38-44), the traffic is transmitted in opposite direction on two counter-rotating rings. Mitchell also teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 7-14), if both rings are fault-free, any node on the ring is free to receive data from either ring. If a fault occurs on one of the rings, then all nodes program to receive data off the other fault-free ring. Mitchell further teaches (figures 5-6; col. 3, lines 27-44) an example of double ring fault which indicates nodes are adapted to maintain indicative information of how other nodes are configured (*at least one of nodes is adapted to reconfigure the direction in which it is to receive the traffic while the network is in operation*).

9. Regarding claim 11, Mitchell teaches a communication device, operating as a node in an ATM ring network, comprises OC-12c cards **1** and **2** (figure 3) respectively. The OC-12c cards are connected through a Fabric Interface Card **FIC 3** to an ATM Switching Core **4** (figure 3; col. 2, lines 45-50). Mitchell also teaches (figure 3; col. 2, lines 45-67; col. 3, lines 1-3) the Ingress Cell Controller **ICC 5**, Egress Cell Controller **ECC 7** and Diablo Switch **DS 6** work together to perform the function of transmitting the outgoing data packets in both of the clockwise and counter-clockwise directions while receiving the incoming data packets in only one of the clockwise or counter-clockwise directions (*a media access control block*). Mitchell further teaches (figure 3; col. 2, lines 45-67; col. 3, lines 1-3) the Ingress Cell Controller **ICC 5**, Egress Cell Controller

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**ECC 7**, Fabric Interface Card **FIC 3**, UP\_ISL and DOWN\_ISL Inter-Shelf Link work together to prepare outgoing data packets for transmission and process incoming data packets (*a traffic processing block*).

10. Regarding claim 13, Mitchell teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 7-14), if both rings are fault-free, any node on the ring is free to receive data from either ring. If a fault occurs on one of the rings, then all nodes program to receive data off the other fault-free ring (*media access control block is configurable to enable selection of one of the directions in which data re to be received and passed*).

11. Regarding claim 14, Mitchell teaches in a Uni-directional ATM Switched Ring **UASR** (figures 3-4; col. 2, lines 38-44), the traffic is transmitted in opposite direction on two counter-rotating rings. Mitchell also teaches in a Uni-directional ATM Switched Ring **UASR** (figure 4; col. 3, lines 7-14), if both rings are fault-free, any node on the ring is free to receive data from either ring. If a fault occurs on one of the rings, then all nodes program to receive data off the other fault-free ring. Mitchell further teaches (figures 5-6; col. 3, lines 27-44) an example of double ring fault which indicates nodes are adapted to maintain indicative information of how other nodes are configured (*media access control block is adapted to maintain information indicative of other nodes are configured and to select the directions to transmit the traffic to the other nodes responsive to the information*).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 12 and 24 are rejected under U.S.C. 103(a) as being unpatentable over Mitchell (US Patent Number: 6,442,134).

14. Regarding Claims 12 and 24, Mitchell discloses all the claim limitation recited in claims 11 and 15, their parent claims. Mitchell does not disclose the predetermined maximum data rate of each ring nor the data rate between the media access control block and the traffic processing blocks. However, it would have been obvious to one skilled in the art to appreciate that the sum of feeder traffic of each node connected to the ring should not exceed the capacity of the each ring. Therefore, the data rate between the media access control block and the traffic control blocks should not be substantially greater than the predetermined maximum rate of the ring.

***Claim Rejections - 35 USC § 112***

15. Claim 5 recites the limitation "wherein the at least one of the nodes comprises multiple nodes". There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***


16. Claims 7-9, 18, 20, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizooou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC  
Albert T. Chou

December 16, 2004

  
CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600